

FACT SHEET

Module 8

Turnabouts

Background

Pulling forward into a driveway and backing out is never a good choice for turning around. The risk of a crash and the liability to be at fault is too high. Backing is the highest risk maneuver that a driver routinely performs. And, when backing occurs into a traffic flow, the risk is increased. One utility company had over 40 percent of their crashes occur while drivers were backing, yet the total driving time their drivers spent backing was less than 1 percent. Just think about that, less than 1 percent of driving time was causing over 40 percent of all crashes. The utility company initiated a driver-training program and put restrictions on drivers backing out of driveways and backing out of perpendicular parking spaces. As a result, backing crashes were reduced by 78 percent.

Several reasons why backing out of a driveway is not a good choice are: the driver cannot get a good view of the roadway to find a gap; once a gap is selected, the car must come to a complete stop, shift gears, and change direction, which means the gap must be five times larger than when driving out forward; if a crash occurs while the car is backing out, the driver backing out would be at fault (failure to yield the right of way), however, when the car is in the process of backing into the driveway and a crash occurs on the roadway, the driver of the car that crashes into the backing car will be at fault.

Sometimes it is necessary to turn around to change directions. This can be a very dangerous and risky maneuver because you are often required to cross other lanes of traffic.

The safest method for changing directions if you miss a turn is to go around the block. This might not always be practical or available, so learning to change directions (turnabout) is an important skill to master.

There are four types of turnabouts:

- 1. Two point turn, backing on the right side
- 2. Two point turn, pulling in on the left side
- 3. U-turn
- 4. Three point or "K" or "Y" turn.

When preparing to do a turnabout, consider what options you have for turning around. Going around the block? Pulling into and out of a public parking lot?

Backing a vehicle is a small part of driving, but it is dangerous because you cannot see what is immediately behind you. Before you back up, you must be sure it is safe to do so and that it will not interfere with other traffic. Back slowly. Turn your head so you can look through the rear window. Do not depend on your mirrors. Be on the lookout for pedestrians and bicyclists on the sidewalk. Back the vehicle no farther than needed.

Procedures for Two-Point Turnabout—Backing on the Right

This type of turnabout can be performed using a driveway or intersection on the right side of the road.

Consider your choices

When preparing to do a turnabout, consider what options you have for turning around. Going around the block? Pulling into and out of a public parking lot?

1

Evaluate the risk

Can you see at least 500 feet or two city blocks clearly in all directions? Will you have a clear line of sight and path of travel to pull out after backing up? Will you need to back up, or is the roadway wide enough to perform the turnabout without backing?

Select a location

Only perform the driveway or intersection turnabout at locations where you have a good line-of-sight and a path-of-travel to back into the street completely and to pull out with a clear view.

Check the rear zone and check the driveway or intersection

Tap brake lights for rear zone control, if necessary. One criteria to determine an acceptable location is to have clear visibility of any approaching traffic. The photo below shows a clear visibility to perform a turnabout at the intersection ahead.

At driveway or intersection, right signal light

If there is a car in the driveway or intersection, wait until crossing the intersection to put on the right signal light to avoid false communication.

Clear intersection

Have the back of your car clear the driveway or intersection.

Pull within 18 inches of the curb

The reference point for 18 inches from the curb is one between the 3 inch and 3 feet reference points. It is better to be closer rather than farther from the curb to give passing traffic better clearance. Give rear traffic an opportunity to pass before beginning to back. Shift into reverse and back to the rear pivot point. Check for pedestrians and cars that may be in the driveway or intersection. If clear, begin turning.



Stopping just past the intersection

Shift to reverse, check intersection

Shift to reverse, look over your right shoulder to detect any rear approaching traffic and check the intersection.

Back to Pivot Point

When the corner support post for the rear window of your car appears to conceal the curb line of the street you are going to back into, begin to turn the steering wheel. Never go faster than a walking pace while backing. When close to objects, use an inch-by-inch speed.

2

Turn wheel from top down

Use hand-over-hand steering to turn the wheel down on the right side to make the back of the car go to the right.

Check front swing of car

As the back of the car goes to the right, the front will swing to the left. Check to be sure space to the left is clear.



Backing into a side street

Back to safety stop

To decrease risk, it is best to back the shortest distance. Back only far enough to get the front of the car even with the curb line, which is our forward safety stop position.

Foot on brake, shift to drive, put left signal on

At this stage of the "turnabout" the maneuver becomes one of making a left turn.

When able, make a precision left turn

National Institute for Driver Behavior (NIDB),2002



Safety stop and preparing to turn left

Procedures for a Two-Point Turnabout—Left Side of the Road

This type of turnabout can be performed using a driveway on the left side of the road when traffic is light. The disadvantage of this type of turnabout is that you must back into traffic before moving forward.

Performing this type of turnabout using a driveway on the right side of the road is very dangerous because you must back across at least two lanes of traffic. Avoid this type of turnabout whenever possible.

Consider your choices

When preparing to do a turnabout, consider what options you have for turning around. Going around the block? Pulling into and out of a public parking lot?

Evaluate the risk

Can you see at least 500 feet or two city blocks clearly in all directions? Will you have a clear line of sight and path of travel for backing? Will you need to back up, or is the roadway wide enough to perform the turnabout without backing?

Select a location

Only perform the pull in turnabout at locations where you have a good line-of-sight and a path-of-travel to back into the street with a clear view.

Check the rear zone and check the driveway or intersection

Tap brake lights for rear zone control, if necessary. One criteria to determine an acceptable location is to have clear visibility of any approaching traffic.

At driveway, left signal light

Signal at least 100 feet or 5 seconds before turning into the driveway

Clear intersection

Pull far enough into the driveway to have the back of your car clear the roadway and sidewalk

Signaling and backing into lane

Give rear traffic an opportunity to pass before beginning to back. Signal right. Shift into reverse and <u>back to the rear pivot point.</u> Check for pedestrians and cars that may be in the roadway. If clear, begin turning.

Back to Pivot Point

When the corner support post for the rear window of your car appears to conceal the curb line of the street you are going to back into, begin to turn the steering wheel. Never go faster than a walking pace while backing. When close to objects, use an inch-by-inch speed.

Turn wheel from top down

Use hand-over-hand steering to turn the wheel down on the right side to make the back of the car go to the right. Turn the wheel quickly.

Check front swing of car

As the back of the car goes to the right, the front will swing to the left. Check to be sure space to the left is clear.

Back and stop

To decrease risk, it is best to back the shortest distance. Back only far enough to get the front of the car to clear the driveway to proceed in new direction

Foot on brake, shift to drive

Procedures for Three-Point Turns

This turnabout is very hazardous because you not only cross lanes of traffic you are also stopped across a traffic lane. If there are no driveways and the road is not wide enough for a U-turn, you may consider performing a three-point turn

Consider your choices

When preparing to do a turnabout, consider what options you have for turning around. Going around the block? Pulling into and out of a public parking lot?

Evaluate the risk

Can you see at least 500 feet or two city blocks clearly in all directions? Will you have a clear line of sight and path of travel for backing? Will you need to back up, or is the roadway wide enough to perform the turnabout without backing?

Select a location

Only perform the three-point turnabout at locations where you have a good line-of-sight and a path-of-travel with a clear view.

Check the rear zone

Tap brake lights for rear zone control, if necessary.

Signal right and move to the right edge of the road and stop

Use reference points to place the vehicle 3-6 inches from the right side of the roadway.

Signal left, check traffic again

Turn the wheel rapidly to the left, while moving slowly to the other side of the road

Use reference points to position the vehicle close to the curb or edge of roadway without hitting the curb or driving off the roadway.

Stop, shift to reverse

Check traffic, turn wheels sharply and back up slowly

Turn the wheels quickly while the vehicle moves slowly. To decrease risk, it is best to back the shortest distance. Back only as far as needed to complete the maneuver and before hitting the curb or driving off the edge of the roadway. Use rear reference points to determine when you are close to the curb or edge of roadway

Shift to forward and check traffic and signal left

Accelerate into the new target area, check mirrors, cancel signal

U-Turns Procedures

U-Turns can be very dangerous, and they may be illegal, so a good rule of thumb is to avoid making a U-turn if you are unsure. Many times cities have ordinances against U-turns and signs may or may not be posted. Performing U-turns in intersections is very dangerous because you increase your risk of being in a crash from all four directions.

Consider your choices

When preparing to do a turnabout, consider what options you have for turning around. Going around the block? Pulling into and out of a public parking lot?

Evaluate the risk

Can you see at least 500 feet or two city blocks clearly in all directions? Will you have a clear line of sight and path of travel? Will you need to back up, or is the roadway wide enough to perform the turnabout without backing?

Select a location

Only perform the U-turn at locations where you have a good line-of-sight and a path-of-travel with a clear view.

Check zones

Tap brake lights for rear zone control, if necessary. Check traffic ahead. If you decide to perform a U-turn in an intersection, are all directions and zones clear?

Signal right and move to the right edge of the road and stop

Use reference points to place the vehicle 3-6 inches from the right side of the roadway. Consider the turning radius of your vehicle and move as far as needed to the right.

Signal left, check traffic again

Allow yourself at least a 20-30 second gap. If you are unsure about whether you can complete the U-turn, allow even more time.

Turn the wheel rapidly to the left, while moving slowly to the other side of the road

Do not stop if you have enough room to turn completely

If you can complete the U-turn without stopping, do not accelerate until your wheels are straight.

Accelerate into the new target area, check mirrors

As you are proceeding in the new direction make sure your turn signal is off.